

# Commonwealth of Virginia

## PCB Total Maximum Daily Load Development for the Roanoke (Staunton) River

March 22, 2005



# Presentation Overview

- What are Water Quality Standards?
- TMDLs
- Public participation process: What can you do?
- Roanoke River Watershed: overview of impairments

# Water Quality Standards

- Regulations based on Federal and State law that set numeric and narrative limits on pollutants
- Purpose of Standards is the protection of 6 designated uses:
  - Primary Contact Recreation
  - Aquatic Life
  - Fishing
  - Shellfishing
  - Drinking Water
  - Wildlife

# Water Quality Standards: PCB Impairment

- The Fish Consumption designated use is not met due to violations of the water quality standard for PCBs
- Waterbody listed as impaired if
  - 2 or more fish samples of different species in one sampling event exceed standard, *or*
  - 2 or more fish samples of same or different species in more than one sampling event exceed standard, *or*
  - There is a VDH fish advisory (VADEQ 2004)

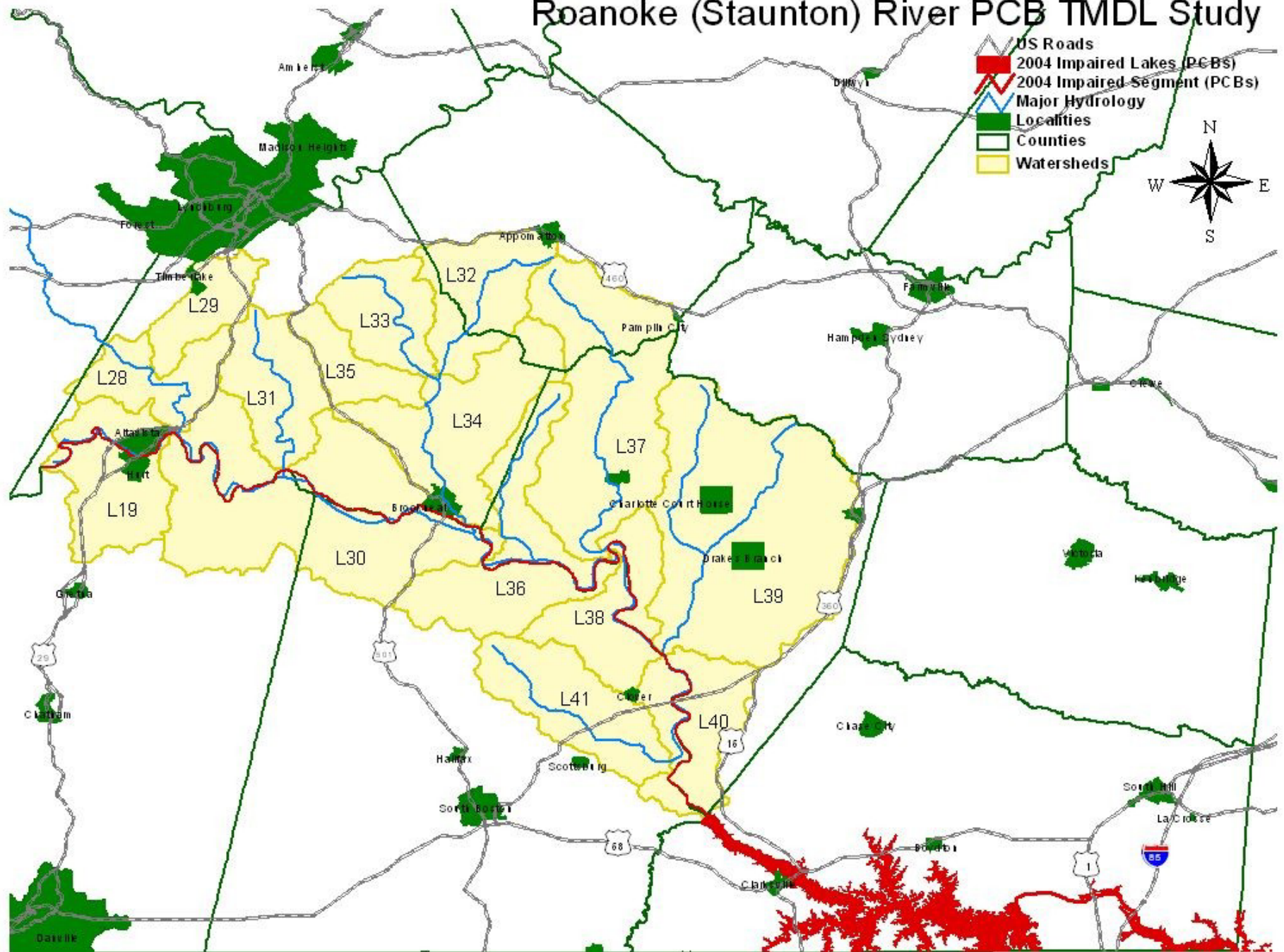
# PCB Standards

State Agency	Fish Tissue	Water	Sediment (screening value)
DEQ	54 ppb	0.017 ppb	676 ppb
VDH	■50 ppb (limited consumption) ■500 ppb (Do not eat)	N/A	N/A

# Impairment Description

- 83.9 miles of Roanoke (Staunton) River listed as impaired in 1998
  - From Leesville dam to pipeline crossing approximately 5.4 miles downstream of the Route 360 bridge

# Roanoke (Staunton) River PCB TMDL Study





# Fish Consumption Advisory

- Virginia Department of Health (VDH) issued a 'Health Advisory' for fishing from Leesville Dam downstream to below Clover based on fish tissue analysis.
- Limit the amount of “limited consumption” fish species consumed to two 8 oz. portions per month.
- Some species listed as “Do Not Eat”
- Young children and pregnant women are advised not to eat any of these fish.
- See website for species list:  
[http://www.vdh.state.va.us/HHControl/Roanoke River.asp](http://www.vdh.state.va.us/HHControl/RoanokeRiver.asp)



# What is a TMDL?

- Amount of pollution a stream can receive and still meet Water Quality Standards
- A TMDL study identifies all sources of pollution
  - **Point source pollution** is discharged from a discrete location such as a pipe, tank, pit, or ditch
  - **Non-point source pollution** originates from diffuse areas (land surface or atmosphere) having no well-defined source
- Calculate the pollutant loading entering the stream from each source, then calculate the reductions needed from each source to attain water quality standards

# Why do TMDLs?

## State and Federal Regulations

- 1972 Clean Water Act (CWA)
  - Water Quality Monitoring
  - Periodic Assessment and list Impaired Waters based on Water Quality Standards
  - Develop TMDLs for Impaired Waters
- 1997 Water Quality Monitoring Information and Restoration Act (WQMIRA)
  - Requires TMDLs for Impaired Waters
  - Requires an Implementation Plan

# Public Participation: How to Stay Informed

- Attend public meetings and provide input
- Contact DEQ if you would like to participate in the technical aspect of the study (TAC)
- DEQ Website: [www.deq.virginia.gov/tmdl](http://www.deq.virginia.gov/tmdl)
  - Meeting dates and draft reports
- Ask to be placed on contact list
- Newspapers (Legal Notices section)
- Virginia Register
  - <http://legis.state.va.us/codecomm/register/vol20/welcome.htm>

# Roanoke River PCB TMDL

## Public Comment Information

➤ Comment period ends on...

▪ **April 21, 2005**

➤ Send comments to:

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